FINAL REPORT ON THE AUTOMATED LEGAL RESEARCH SURVEY

PRODUCED BY

FLITE

Federal Legal Information Through Electronics

FOR

AUTOMATED LEGAL RESEARCH
INTERAGENCY PLANNING
COMMITTEE

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Report on the Automated Legal Research Survey

For The Automated Legal Research Interagency Planning Committee

I. Introduction

Section 1-601 of Executive Order 12146 requires that

> "The Attorney General, in coordination with the
> Secretary of Defense and other agency heads shall
> provide for a computerized legal research system
> that will be available to all Federal Law offices
> on a reimbursable basis."

The Attorney General delegated the implementation of Section 1-601 to the
Justice Management Division. The Automated Legal Research Interagency
Planning Committee (ALRIPC) was created to provide the interagency
coordination required by the order. Its primary tasks are to study the
Automated Legal Research (ALR) needs of the federal government and to make
recommendations for a federal ALR system.

In order to properly fulfill these tasks, the ALRIPC decided to
survey potential federal ALR users. The design and execution of the survey
was delegated to Federal Legal Information Through Electronics (FLITE),
which had two members on the ALRIPC as representatives of the Department of
Defense.

FLITE obtained from the Office of Personnel Management a tape
containing the names of federal employees with a salary greater than
$17,000 from the following occupational series: Personnel Management and
Industrial Relations (GS-2XX), Accounting and Budget (GS-5XX), Legal (GS-9XX),
Business and Industry (GS-11XX). Each record contained only the
employee's name, agency and agency subdivision, office address, occupational
code, and supervisory code.

FLITE selected from this tape all managers in attorney positions and,
on a random basis, one-half of the managers from other occupations deemed
to have some probability of requiring legal research. Occupations were
included from each of the series described above. In addition, a questionnaire
was sent to each U.S. Attorney's office and to Military Legal offices from
each service. A total of 3623 questionnaires was sent; 1643 to attorney
managers (970 civilian and 673 military) and 1980 to nonattorney managers
(all civilian).

Only one response was requested per office since many of the
questions requested counts and other information with regard to the office
as a whole, and duplication was to be avoided. Printed guidelines as to the
definition of "office" were provided, and further guidance was provided over
the telephone.

The questionnaires were mailed during the first two weeks of January,
1982 and responses were tabulated through the middle of March, 1982. A
brief follow-up questionnaire was sent to those from whom no response had
been received in order to determine, wherever possible, the reason for not
responding.

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Five hundred eighty-three questionnaires were excluded from the sample for a variety of reasons, including the following most common circumstances: questionnaires returned to FLITE undeliverable (141), questionnaires misrouted and never received by the addressee (213), duplicate questionnaires received in one office (158)[1].

55.6% (1691) of the remainder responded to the survey. Of the responses, 37.7% (637) indicated that their offices did not require legal research and 9.4% (159) indicated that their offices require legal research but would not use ALR. The remaining 52.9% (895) reported potential ALR users in their offices.

Only respondents reporting potential users in their offices were requested to complete the questionnaires, and only their questionnaires were included in the computer analysis. Completed questionnaires were received from 55 different departments and independent agencies.

The questionnaires were extensively edited, both visually and by computer, and a lengthy series of statistical reports were produced. This report is an attempt to summarize and highlight the most significant results in a more easily accessible form. A great deal more information exists in the computer analysis which it is impractical to include here.

II. Patterns of Current and Potential ALR Usage

A. Number of Users

Of those selected for the survey, 1101[2] indicated that their offices require legal research. Of this group, 85.6% (942) stated that their offices would make use of an ALR system, assuming access to a system containing the relevant legal materials.

The completed questionnaires[3] gave the number of potential users in each office by occupational series. Approximately 73.1% were from the legal series (including copyright, patent, and trademark - 2.1%). The next highest percentages were from accounting and budget (8.7%), personnel management and industrial relations (8%), and business and industry (3.3%). The last group includes careers in procurement and contract management.

Footnote 1
The high rate of mailing problems was probably caused by the following factors: the address information on the tape was somewhat out of date; the address specified was often a central personnel office, which would then have to forward the questionnaire to the addressee; there were an unusual number of reorganizations and reductions-in-force since the tape was created.

Footnote 2
895 questionnaires completed in time for computer processing, 11 questionnaires completed too late for processing, 36 follow-up questionnaires indicating a need for legal research and an interest in ALR but an unwillingness to participate in a survey, 159 follow-up questionnaires indicating that their offices need legal research but would not use ALR.

Footnote 3
The statistics for the balance of this report refer only to the 895 completed questionnaires which were the subject of the computer analysis.

B. **Number of Searches**

The respondents were asked to estimate the number of searches during the preceding year which they either performed themselves on a terminal or requested to be performed by a service center.[4] Despite the fact that all of these offices had people interested in using ALR, only 54.4% reported searches.

Of offices having searches, the average number per potential user was 1.2 in offices without access to a terminal, 12.8 in offices with access to a terminal located outside the office, and 20.1 in offices containing a terminal.

These ratios indicate a strong correlation between usage and access to a terminal and an even stronger correlation between usage and convenient access, that is, where a terminal is located in the immediate office. These figures must be used with caution because they are based on estimated searches (very few offices keep records of searches) and the estimates are most inaccurate in the offices with the largest number. Furthermore, it may be that the offices that obtained terminals had a more frequent need for research than other offices. Nevertheless, the differences in searches per user are so great that the existence of a correlation between usage and terminal access seems almost certain. Furthermore, its existence is supported by the fact that 61.1% of all offices indicated that installing a terminal in their offices would be very or extremely significant in increasing their ALR usage and by the statistics indicating that users of on-line systems make more frequent use of the system than users of FLITE, a batch system.[5] As a cautionary note, it should be mentioned that the survey did not investigate the types of searches done on batch systems versus those done on-line. Most FLITE searches are on subjects and issues whereas other information has suggested that a major use of on-line systems is for very simple tasks like shepardizing so that the usage work load may not be as different as the numbers of searches suggests.

Offices were also asked to project their annual searches over the next three years assuming access to an ALR system. The average number per potential user was 19.9 in offices without access to a terminal, 22.5 in offices with access to a terminal located outside the office, and 28.5 in offices containing a terminal. All of these represent an increase over the ratios of actual searches per user during the preceding year (1.2, 12.8, and 20.1, respectively); but the increase was greatest for offices without terminal access (15582), less for offices with access to a terminal outside the office (76%), and least for offices containing a terminal (42%). It seems likely that when the respondents assumed access to ALR, they assumed access by a conveniently located terminal. If this is true, the different rates of increase reinforce the correlation between usage and terminal access.

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The fact that only 54.4% of offices interested in using ALR actually reported searches during the preceding year and that offices which reported searches during the past year projected much higher numbers for future years indicate a tremendous potential for growth in ALR usage.

C. Distribution of Terminals

Only 33.4% of the offices had access to an ALR terminal and only 13.3% had a terminal in the office.[6] When considered in the light of the strong correlation between usage and terminal access, these percentages indicate an even greater potential for growth in ALR usage if terminals are more widely distributed.

63.2% of offices with terminal access share terminals with other offices. The average number of terminals to which offices have access (not necessarily at one location) is 2.1.

58.4% have access to JURIS, 50.9% to LEXIS, 16.1% to WESTLAW, and 14.6% to some other ALR system.[7]

23.3% of _all_ offices reported terminals used for non-ALR applications such as word processing. This is a potential resource which could be used for systems like JURIS and WESTLAW which can be accessed through a number of standard terminals.

D. Use of Particular Systems

The approximate number of persons in the surveyed offices who have used one of the four leading systems and the percentages of potential users in those offices are as follows: LEXIS - 2779 (25.5%), JURIS-- 2310 (21.2%), FLITE - 1920 (17.6%), WESTLAW - 501 (4.6%). Apparently there is significantly less familiarity with WESTLAW than with the other systems.

Again, these figures indicate important growth potential, particularly since there is doubtless some duplication between the percentages (representing people who have used more than one system) and because the percentages probably include people who only had access to the ALR system in law school or in a previous position. They also indicate a formidable training/information task since so many potential users have had no exposure to ALR. This conclusion is reinforced by the fact that 27.5% of the questionnaires indicated that a lack of awareness concerning ALR was a very or extremely significant factor inhibiting usage; another 20.3% indicated that it was a moderately significant factor.

Footnote 6
See Figure 1 for a detailed breakdown on location of terminals.

Footnote 7
E.G., _DIALOG, REG-ULATE, LEGI-SLATE as well as agency in-house systems. 3.9% of all offices reported that their agencies had their own systems._

On the average there are 6.8 potential users in an office containing people who have used FLITE. The analogous figures for the other systems are as follows: JURIS - 16.9, LEXIS - 19.4, WESTLAW - 12.4. One must be cautious in interpreting these figures, since the presence of people who have used a system does not always mean that it is available to the office, but these differences in the average size of the office may be related to the costs of the various systems. One would expect the smallest offices not to have terminals but to make use of the FLITE batch system, and the largest offices to make use of leased custom-terminal service provided by LEXIS and JURIS. The intermediate average size of WESTLAW offices may be accounted for by users who access WESTLAW through their own word processing terminals. This mode of ALR service costs less than JURIS and LEXIS but more than FLITE.

In offices containing persons who have used FLITE, an average of 58.8% of the potential users in the offices have used the system. The analogous percentages for the other systems are as follows: JURIS - 52.6%, LEXIS - 46.8%, WESTLAW - 32.3%. One can speculate that these differences may relate to ease of learning the systems. FLITE, with the highest percentage, requires no knowledge of the system by the end-user. LEXIS and JURIS, with many user-friendly features, are easier to learn than WESTLAW.[8] However, there is insufficient information to do more than speculate as to the reasons.

The percentages of system users who have used the system more than ten times are: JURIS - 48.8%, LEXIS - 44.3%, WESTLAW - 33%, FLITE - 14.1%. These percentages support the correlation, already discussed, between access to a terminal and higher useage. The experience at FLITE has been that an attorney typically seeks outside research assistance when the problem is novel or unusually difficult, when he is pressed for time, when traditional research methods have been unsuccessful, or when his library is inadequate. Some users do make frequent routine use of FLITE, but that is probably not the typical case.

It is difficult to speculate as to why the frequency of WESTLAW use is lower than for the other on-line systems. Some possibilities are that offices that use WESTLAW have less intense research needs than offices using LEXIS or JURIS, that users are somewhat less satisfied (see below), or the mere fact that WESTLAW is a newer system.

Users of each system were asked to characterize the research results as "excellent," "good," "fair," or "poor." They were also asked to characterize use of the system as "very easy and efficient," "moderately easy and efficient," "moderately difficult, frustrating, or inefficient," or "very difficult, frustrating, or inefficient."

The level of satisfaction with all of the existing systems seems quite high, as indicated by the percentages of users rating the research results good or excellent and the system moderately or very easy and efficient to use (see Figures 2 and 3). Satisfaction with LEXIS appears to be somewhat higher than with the others.

Footnote 8

For greater detail, see FLITE comparison of JURIS, LEXIS, and WESTLAW.

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The percentages rating research results poor or system use as very difficult, frustrating, or inefficient were in the 2 - 7% range except with respect to WESTLAW, for which 16.6% rated research results as poor. This negative result could be discounted by the fact that it was caused by the response from one large U.S. Attorney's office. The respondent did not actually poll the users but based his response on personal observations and past conversations.

The most common complaints with respect to FLITE were difficulty of access by Autovon (a DOD telephone system) and time required for receiving results in the mail. Most of these complaints were from overseas locations. The comments on the other systems were too various to characterize.[9]

No statistics were compiled as to other systems, but it is worth noting that in addition to DIALOG, LEGI-SLATE, and REG-SLATE, the survey came across the following ALR systems (source of the questionnaire is in parentheses): Computer-aided Environmental Legislative Data System (CELDS) (Army), JAGR - dealing with transportation law (Army), LEGS - status of legislation (Army), Recall - office policy and precedent (DOD), FTC Legal Research System - internal memos and reports (FTC), IndLaw - Indian Law (Interior), Allex - legislative history of Alaska National Lands Conservation Act (Interior), Coalex - legislative history of the Surface Mining Act of 1977 (Interior), Legal Information Retrieval System (LIRS) - NASA legal opinions (NASA), and an unnamed system containing Department of Transportation documents (DOT).

Proliferation of agency ALR systems appears to be a continuing trend. Periodically FLITE receives information requests from agencies planning new systems; requests were received from at least two agencies in August, 1982 alone. The problem with this approach is a duplication of effort and expense and the difficulty of any other federal agency in making use of these data bases.

III. Attitudes Toward ALR

The survey disclosed very little negative feeling towards ALR generally. Only 4% to 8% of the respondents stated that factors like a lack of confidence in ALR, difficulty in learning and using ALR systems, unsatisfactory research results, and lack of time savings were very or extremely important in inhibiting ALR usage (see Figures 4.1 - 4.2 for a complete graph of factors and percentages). Conversely, more than half of the respondents with ALR experience indicated as very or extremely important factors motivating their ALR usage that ALR saves time (62.8%), provides more comprehensive results (53.1%), and is more cost effective (51.3%) than manual research (see Figure 5 for a complete graph of factors and percentages). What might be called "necessity" factors, such as the lack of an adequate library or the lack of manual research aids for a particular legal source or problem, though significant, were less so than the above. With regard to libraries, several comments indicated that the ability to achieve savings by reducing the materials maintained in the office library would be a factor motivating ALR use.

Footnote 9
The questionnaire comments have been printed separately in order of question number.

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These positive attitudes toward ALR tie in with results already discussed; namely, the high percentage of offices interested in using an ALR system and the high level of satisfaction among users of existing systems.[10]

The most significant factors inhibiting ALR usage were lack of information concerning ALR and logistical factors such as costs, time required to receive mailed printouts, having to go through a service center (the comments indicate telephone access and mailing times as primary problems with this kind of service), and inconvenient terminal locations. The only significant inhibiting factor relating to the substantive nature of the ALR system was "insufficient data bases." Even as to these factors, the percentages indicating that they were very or extremely important were much lower than the percentages rating motivating factors as very or extremely important. The highest was "cost of service" at 36.5%.

In addition to rating inhibiting and motivating factors, respondents also rated the probable effect of certain actions on ALR usage. As discussed above, the most significant action was installing a terminal in the office, with 61.1% rating it as very or extremely significant in increasing usage (see Figure 6). This percentage may even be understated since persons who already have a terminal in the office may not have rated the factor high.

There is a big drop to the next most significant factor, "increasing the number of data bases" (40.3%). The comments indicate that in addition to the scope of data bases, timeliness is also an important concern. At least one of the comments pointed out that unless the data base is both timely and comprehensive, the complete job cannot be done on the system; the researcher has to do manual research to fill the gaps, with considerable loss in efficiency.

"Decreasing costs" was the third most significant factor, with 38.3% indicating that it would be very or extremely important. This response, in conjunction with the fact that costs were rated the most important factor inhibiting ALR usage, confirms the significance of cost considerations. In fact their importance may be greatly underrated; at least six of the respondents indicated that they rated costs as insignificant because the service was paid for by another office. This situation applies to many more surveyed offices than those who took the trouble to comment upon it; 91.3% of the completed questionnaires reported no ALR costs although 34.6% reported searches. The funding officials are likely to be much more concerned with costs than the "free" end-users.

IV. Preferences of Potential Users

A. Format and Timeliness of Results

On the average, offices reported that they desired a printed copy of search results 63.3% of the time. For the balance of their searches a terminal

Footnote 10
There may be some bias in these results because the group who did not respond to the survey may include a higher percentage of people with negative attitudes toward ALR.

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display was considered sufficient. 22.8% of the respondents indicated that a method of printing results of terminal searches without having to display them on the screen would be very or extremely significant in increasing ALR usage, and an additional 21.7% considered such a feature moderately significant.

The respondents were asked to estimate the percentages of their searches for which the various types of output format would be preferred. The formats and the averages of the responses are as follows: citation only – 13%, with headnotes – 18.9%, citation with both KWIC excerpts and headnotes – 23.5%, full text – 23.8%. Thus, on the average, more than the citation is desired for 87.7% of the searches. When the percentage for the combination of excerpts and headnotes is added to the respective percentages for headnotes alone and excerpts alone, the result is that headnotes are preferred to be included in 44.4% of searches, and the same is true for KWIC excerpts.

There is a significant, but not critical, concern for improving timeliness of results, both on-line and off-line. 33.5% of offices indicated that "providing faster results from the service center" would be very or extremely significant in increasing usage and an additional 22.1% chose "moderately significant." The analogous figures for "improving speed of searches performed on a terminal" were 31.7% and 20.9%, respectively. Similarly 23.6% indicated the time to receive mailed printouts as a very or extremely important inhibiting factor, and 17.3% as a moderately important factor.

The respondents were asked to indicate the percentages of their search results that are required within stated time intervals. The intervals and the average responses are as follows: less than 1 hour – 11.5%, 1 to 4 hours – 13%, any time during the same day – 20.5%, by the next morning – 14.8%, 2 to 4 days – 21.3%, 5 to 7 days – 18.9%. When the results are weighted in proportion to the number of searches reported by the various offices, which is roughly equivalent to giving greater weight to the responses of offices containing terminals[1], the preference for search results "in less than 1 hour" rises to 40.2%. Among the possible explanations for this difference are that these offices actually have a much higher proportion of problems with extreme urgency or that they simply have become accustomed to having their searches processed in a shorter time frame by means of an on-line service.

B. Service Center vs On-Line Service

The respondents were asked to estimate the percentage of their offices' searches which they would prefer to perform themselves on a terminal and the percentage which they would prefer to have performed by a service center. The averages of the responses were 66.7% and 33.3%, respectively.

On the average, respondents indicated that telephone consultation with an ALR expert would be desired for 25.4% of all terminal searches. In addition, 50% of the offices indicated that telephone consultations concerning ALR search techniques would be a very or extremely useful service with another 29% indicating "moderately" useful.

Footnote 11
Because of the strong correlation between estimated number of searches and the presence of a terminal.

The percentages for consultations and for use of a service center are lower when weighted by the estimated number of searches in the preceding year. From this difference one can infer that offices with a large number of searches, typically performed on a terminal, are likely to use a service center or consult an outside ALR expert less frequently.

These figures further reinforce the prior conclusions relating number of searches to access to an on-line system. Nevertheless, they also show a continuing need for a service center, both to perform searches directly and to advise users on their own on-line searches. The two functions are closely related since the best advice is likely to be given by persons with extensive experience in searching.

Other survey results, some of which have been discussed in other contexts, support the need for a service center. Access to a service center is indicated by 24.3% of the offices as having a very or extremely significant effect on ALR usage and by 19% as having a moderately significant effect. Significant percentages reported that their offices were too small to justify an ALR terminal and that the cost of ALR was a significant inhibiting factor. On the average, offices can wait two or more days for results of 40% of their searches so that timeliness considerations frequently do not prevent use of a service center, even without improvements in distribution of results. Finally, approximately 27% of potential users are not from the legal occupational series, and an additional undetermined percentage of users from the legal series are not lawyers. These groups are likely to have a greater need to have searches performed by a service center.

C. Terminals: Number, Location, and Operation

When asked how many terminals would be required to provide adequate ALR service to their immediate offices, only 14% gave a response greater than "1"; 74.6% answered "1", 7% answered "0", and 4.4% left the answer blank (see Figure 8 for a further breakdown). Thus a single terminal appears to be the standard requirement.

Where an organization requires more than one terminal, other survey results indicate that the preferable strategy would be to disperse them rather than to put more than one terminal in a single location. The statement, "the terminal which can be used by your office is at an inconvenient location" was rated as a "very or extremely" important factor inhibiting ALR usage by 15.4% of all offices. The importance of this percentage may be magnified by the fact that only 33% of all offices had access to a terminal and only 19.7% had access to a terminal that was not located in the immediate office. Thus 15.4% is a large proportion of the group to which the question was applicable. Furthermore the estimated number of searches divided by the number of potential users in offices with access to a terminal located outside the office is only 64% of the number of searches per potential user in offices containing terminals. These figures indicate that maximum use would be attained by minimizing the distance between users and terminals rather than concentrating several terminals in a terminal room or library. After all, one of the reasons people use ALR is to avoid trips to a library (see Figure 5).

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Several questions addressed the operation and functioning of terminals. The following are possible ALR improvements and the percentages of offices rating them very or extremely significant in increasing ALR usage or moderately significant:

	Very or Extremely Significant	Moderately Significant
Simplifying terminal operation	26%	23.5%
Improving the speed of terminal searching	31.7%	20.9%
Adding new kinds of search commands	24.3%	28.1%

In order to avoid complicating an already lengthy questionnaire, no attempt was made to evaluate particular search functions and commands, but the comments mentioned the following: implementation of Shepards and the "roll" (scroll) key on JURIS, a way to abort a screen display, a way to limit the words KWICed and highlighted on LEXIS.

"The frequency with which the system or terminal is out of service" ranked relatively low as a factor inhibiting ALR usage with 10.9% of all offices rating it very or extremely important and another 12.1% rating it moderately important. When weighted by the number of persons in the office who have actually used one of the major on-line systems, the percentages are higher:

	Very or Extremely Important	Moderately Important
Weighted by number of LEXIS users	15.4%	4.7%
Weighted by number of JURIS users	24.7%	11.3%
Weighted by number of WESTLAW users	24.3%	11.4%

These statistics suggest that JURIS and WESTLAW users may be more concerned about down-time than LEXIS users, but one can not make such an inference with any degree of confidence because a single office often contained people with experience on different systems and only one response was given per office.

    D. Data Bases

The questionnaire included a list of 109 possible data bases. For each data base, the respondents were asked to circle a number from 1 to 5 indicating that the material was "not useful," "slightly useful," "moderately useful," "very useful," or "extremely useful" in their immediate offices. Figures 10.1 - 10.11 rank these data bases in order of the percentage of questionnaires selecting "very" or "extremely" useful. Figures 11.1 - 11.11 rank them by the average of the numbers assigned to each data base, where 1 = "not useful" and 5 = "extremely useful." The rankings of a particular data base may differ significantly in the two graphs. For example, a specialized data base like

the Military Justice Reporter may be of prime importance to a particular group of users and of absolutely no value to others. Such a data base will rank higher in Figure 10 than in Figure 11. The former relates to the percentage of offices that place a strong value on a data base, whereas the latter takes into account the distribution among all responses.

When looking at the rankings it is important to know that although they reflect the responses of 55 agencies, the responses were not evenly distributed among these agencies. For example, the low ranking of Security and Exchange Commission Decisions and Reports is probably partially a result of the fact that only one response was received from the SEC. On the other hand the response rate may be some indication of the agency's interest in participating in a federal ALR system, although the vicissitudes of mailing and forwarding the questionnaires prevent any certainty on this account. The agencies with the largest number of responses are the following: Army (197), Air Force (194), Navy (93), Justice (73), VA (57), Treasury (47), Defense (25), Health and Human Services (24), Energy (17), Transportation (17), Commerce (15), NASA (13), Agriculture (12), FCC (11), and Interior (10). See Figure 1.

It is clear from the results that a large expansion of data bases is desired. This conclusion is also supported by the number of respondents indicating that the lack of certain data bases was an important factor in increasing usage (see discussion supra, p 8). Many of the requested data bases are available on one of the ALR systems, but others are not currently available on any system. In fact some of the questionnaires requested data bases not included in the list of 109.[12] The following are the percentages of offices requesting data bases not listed on any system by type of legal source: Regulations - 12.1%, Administrative Decisions - 7.7%, Secondary Sources - 7.5%, Legislative - 5.4%, International Agreements - 3.5%, Court Decisions - 3.4%.

Actual decisions on adding data bases will have to take into account factors other than user preferences including the size of the data base, the availability of photocomposition tapes, and, for specialized data bases, the number of persons in the relevant agency who are likely to subscribe to the ALR system. Some data bases that may not be justifiable on-line may be maintained for searching in a batch mode. Another possibility is to have some data bases share on-line storage devices in a rotation schedule so that they are searchable on-line part of the time.

A capability and willingness to add data bases of special interest only to a particular agency, together with efforts to publicize this policy among all agencies, may reverse the tendency toward proliferation of many in-house systems. Simply adding a data base to a general purpose ALR system should be much less costly, permit more widespread use of the product, and permit the agency to access other data bases in addition to its specialized data base.

Footnote 12
The specific suggestions have been reproduced separately in the report on the comments to the questionnaire.

E. Other Services

The respondents were asked to evaluate the usefulness of a number of services in addition to basic research service. The graph of these results in Figure 9 requires no comment other than to conclude that all of the listed services were favorably received, suggesting that any future ALR system should retain and enhance capabilities in these areas.

It is also worth noting that "providing more or improved training" was rated by 28.4% of the offices as very or extremely significant in increasing ALR usage and by another 27.7% as moderately significant.

F. Funding Methods

The respondents were asked to rate four methods of funding ALR. These are the methods, in order of preference, along with the percentages indicating that the method would moderately or greatly encourage ALR usage:

(1) A working capital fund initially encouraged by Congress and replenished from the appropriations of the departments and agencies in proportion to their usage (53%)

(2) Payment in advance by the agency to which your office belongs (37%)

(3) A services contract with monthly billing, funded out of your office's budget (13%)

(4) Payment by purchase order for each individual research request made to a service center (assuming that the research would be performed without waiting for the purchase order) (5%).

The percentages indicating that the respective funding methods would greatly discourage ALR usage are as follows (in the same order as above): 7%, 16%, 20%, and 52%.

Not surprisingly, there is a large drop in preference level between methods 1 and 2, which are not dependent on the immediate office budget, and methods 3 and 4, which are. These figures are supported by the fact that 33.2% of the offices identified "difficulty in obtaining any funding for ALR regardless of cost" as a very or extremely important factor inhibiting usage, and another 16.1% characterized it as moderately important. The particular procedures used for funding as opposed to the basic question of the source of the funds (agency level or office level) appears to be of less concern. Only 8.2% indicated "burdensome procedures for payment" as a very or extremely important inhibiting factor and only 18.7% identified simplifying such procedures as an action that would have a very or extremely important effect on increasing usage.

V. Summary of Implications for a Future System

1. An on-line system will carry the bulk of the search load. At the same time, a service center will continue to play an essential role, most likely

in the following areas: (a) serving occasional users and non-lawyers (b) serving attorneys who prefer not to learn ALR techniques, (c) serving offices unable to have a terminal either because of size, lack of funds, or overseas location, (d) providing access to data bases not available on an office's system, (e) performing unusually complex or difficult searches, (f) carrying out large, in-depth research projects, and (g) providing advice on search techniques to on-line users.

2. The service center should include a batch system, in addition to the on-line system(s) in order to search data bases whose frequency of use does not justify on-line status and to handle a high volume of searches efficiently. In the FLITE experience, based on use of a batch system and all the leading ALR systems, it is impossible to operate a service center effectively and efficiently without both capabilities. Ideally, all data bases should be searchable by the batch system, and all frequently used data bases should be searchable on-line.

3. The efficiency of the entire system would be enhanced if the batch capability were extended to users in the field, so that they could enter searches on their terminals for batch processing. The majority of offices do not need "immediate" results for most of their research.

4. It would be desirable to permit access by as many types of terminals as possible, in addition to providing the option of a custom terminal, in order to take advantage of the large numbers of terminals already in the field.

5. Where new terminals are added, it is preferable to disperse them as widely as possible rather than concentrating them in one location.

6. The on-line system should incorporate improvements in search commands, speed, and reliability.

7. The on-line system must be capable of providing a hard copy of search results, including off-line printing of material without having to display all of it on the terminal screen.

8. Display and printing options should include headnotes, Key-Word-In-Context (KWIC) excerpts, the combination of the two, full text, and citations alone.

9. The capability of electronic distribution of both off-line prints of on-line search results and the results of service center searches is highly desirable.

10. Telephone access to the service center must be easy and reliable, perhaps by use of an "800" number in addition to FTS and Autovon. The current reliance on Autovon, FTS, and regular commercial lines is clearly not adequate for all users, particularly those who must rely on Autovon.

11. The capability of providing other services in addition to searching is highly desirable, including litigation support and the publication in microform of citators, indices, and unpublished decisions.

12. A considerable expansion in the number of data bases and improvements in timeliness of data bases are strong preferences of potential users.

13. There is a need for more education, publicity, and training.

14. Funding at the agency level rather than by each user or office, especially by a working capital fund, would maximize usage.

15. Perhaps the overwhelming implication for a federal ALR system is that it should plan for a tremendous growth in numbers of searches and terminals. This growth will be shared in by the service center as well as by the on-line system; even under current conditions, FLITE's searches increased by 25% in 1981 and increased at an annual rate of 28% during the first seven months of 1982.

16. The extent to which this potential growth becomes a reality probably depends to a large degree on whether the preferences and needs listed above are met. The challenge to providers of ALR service will be to manage growth while improving service so that the full potential of ALR is realized.

Note on the Graphs

The numbers appended to the labels for the bars in Figures 4 through 7 and 9 through 11 refer to the question number from which the information was derived.

Number of Offices Responding by Agency

17 Transportation 1.9%	
17 Energy 1.9%	
24 HSS 2.7%	
25 Defense 2.8%	
47 Treasury 5.3%	
57 VA 6.4%	
73 Justice 8.2%	
93 Navy 10.4%	
151 16.8%	
194 Air Forces 21.7%	
197 Army 22.0%	
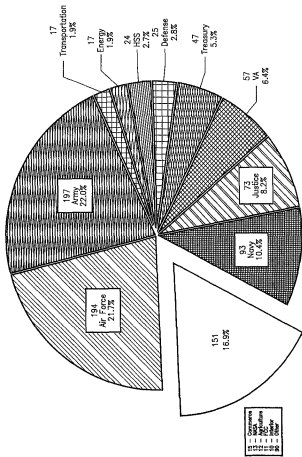
FIGURE 1

FIGURE 2

Percent of Users
Rating Research Results as
Good or Excellent

FIGURE 3

Percent of Users Rating
the System Moderately or Very
Easy and Efficient to use

PERCENT OF USERS

Figure 2 (left chart):

- LEXIS: 85.4 (40.4 / 45.0)
- JURIS: 75.6 (27.9 / 47.7)
- FLITE: 72.9 (31.2 / 41.7)
- WESTLAW: 64.3 (47.9)

GOOD EXCELLENT

Figure 3 (right chart):

- LEXIS: 84.9 (36.3 / 48.6)
- WESTLAW: 79.7 (32.3 / 47.4)
- FLITE: 74.2 (26.9 / 47.3)
- JURIS: 70.3 (24.1 / 46.2)

MODERATELY EASY VERY EASY

Percent of Offices Rating Factor as Very or Extremely Important in Inhibiting the Use of ALR

FIGURE 41

PERCENT OF OFFICES

Legend: VERY, EXTREMELY

71: Cost of the service — 36.5 (19.2, 17.3)
72: Difficulty obtaining and justifying funding or cost — 33.2 (19.0, 14.2)
74: The number of potential users is too small to justify an ALR terminal — 31.8 (16.5, 15.3)
73: Lack of awareness of or information concerning ALR — 27.5 (13.1, 14.4)
81: The time required to receive printed search results in the mail — 23.6 (10.8, 12.8)
84: Important legal materials are not included in the ALR system — 21.9 (10.0, 11.8)
82: Difficulty in performing search yourself on a terminal — 20.8 (9.2, 11.6)
83: Having search performed by someone in the service center rather than performing search yourself on a terminal — 15.7 (7.5, 8.2)
86: Difficulty getting through to the service center by telephone — 15.4 (8.5, 6.9)
87: The terminal which can be used by your office is at an inconvenient location — 6.9

Percent of Offices Rating Factor as Very or Extremely Important in Inhibiting the Use of ALR

FIGURE 4.2

PERCENT OF OFFICES

85 Freq with which the system or term is "Out of Service": 10.9 / 6.9

82 Performing ALR search yourself instead of having ALR expert at svc center perform the search: 8.3

73 Burdensome procedures for payment: 8.2

77 Difficulty or time required to use ALR: 7.6

80 Prior experience with ALR did not save research time: 7.0

79 Unsatisfactory results obtained in prior experiences with ALR: 6.6

78 Difficulty in performing ALR searches, even other than learning terminal operation and search commands: 5.0

88 Prior experience with ALR was unsatisfactory for reasons not listed there: 4.7

76 Lack of confidence in the basic concept of ALR: 2.5

VERY ▢   EXTREMELY ▨

FIGURE 5

PERCENTAGES

	VERY	EXTREMELY	Total
91 ALR saves time for the researcher	30.2	32.6	62.8
96 ALR provides comprehensive coverage for certain areas or questions not found through use of ALR	30.0	23.1	53.1
92 ALR is more cost-effective than manual research for some areas	26.9	24.4	51.3
93 Can't research projects and grab for facts only through use of ALR	21.8	25.4	47.2
98 Manual data isn't available for some areas, e.g. for digest or index entry	22.0	20.4	42.4
95 No non-research data exist for certain legal materials	19.6	20.0	39.6
90 Other ALR library is unused or becomes informal for research certain areas	16.7	12.5	29.2
89 Use of ALR saves trips to library which is often in enforcement districts	11.5	7.5	19.0

VERY   EXTREMELY

Percent of Offices Rating Factor as Having a Very or Extremely Important Effect on ALR Usage

FIGURE 6

PERCENTAGES (vertical axis: 10 through 80)

VERY / EXTREMELY (legend)

104 Installing a terminal in your office: 61.1 (19.2 / 41.9)

87 Increase no. of legal materials (data bases): 40.3 (24.0 / 16.3)

98 Decreasing the cost of service: 38.3 (18.0 / 20.3)

106 Provide faster results for search performed by service center: 33.5 (17.6 / 15.9)

105 Improve speed of searching performed on the terminal: 31.7 (18.8 / 12.9)

100 Provide more or improved training: 28.4 (20.0 / 8.4)

101 Simplifying operation of the terminal: 26.0 (17.2 / 8.8)

102 Adding new kinds of search commands: 24.3 (15.5 / 8.8)

102 Access to serv'ce cent'r of attorneys trained in ALR: 24.3 (15.8 / 8.5)

107 For search on form, means of print, results without display on screen: 22.8 (11.6 / 11.1)

99 Simp proced for obtain approval paying for service: 18.7 (11.1 / 7.6)

Location of Terminals For
Offices with Access to ALR Terminals

FIGURE 7

80

70

60

50

40

30

20

10

PERCENTAGES

39.7 — 109 In the office

32.6 — 111 Different floor

24.1 — 110 Same floor

21.3 — 113 Not within walking dist.

17.4 — 112 Within walking dist.

*Of 895 surveyed offices, 299 (33.4 percent)
had access to an ALR terminal.

Percentage Breakdown of Offices by Number of Terminals Required

UNKNOWN 4.5%

3 OR MORE 6.6%

| 6+/0.56% |
| 5 1.56% |
| 4 1.79% |
| 3 2.66% |

NO TERMINALS 7.0%

2 TERMINALS 7.4%

1 TERMINAL 74.6%
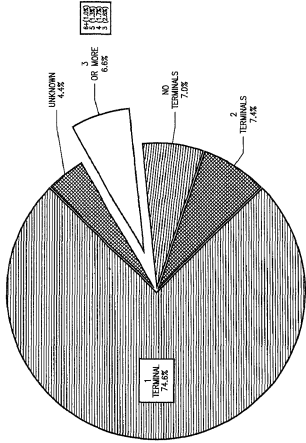
FIGURE 8

Percent of Offices Rating Other Services as Very or Extremely Useful

FIGURE 9

Legend: VERY, EXTREMELY

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.1

| | EXTREMELY USEFUL | VERY USEFUL |

PERCENT OF OFFICES

Data Base	Total	Extremely Useful	Very Useful
177 United States Code	83	64	19
178 F.2d	79	65	14
U.S. Decisions Court Supreme Court	78	65	13
179 F.Supp.	75	60	15
Code of Federal Regulations	72	51	21
240 Shepard's Citations	60	46	14
Recent Public Laws	58	33	25
180 Fed.	56	39	17
Cong. Record Reporter (Pub 1921—Present)	56	40	16
181 U.S. Court of Claims	54	37	17

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.2

Legend: VERY USEFUL, EXTREMELY USEFUL

Data Base	Total	Very Useful	Extremely Useful
17 Congress. General Decisions (Unpub) 1985–Present	53	39	14
202 Merit System Protection Board Decisions	50	35	15
148 Federal Personnel Manual	47	30	17
150 Federal Register	46	27	19
149 Legislative History	45	24	21
246 American Law Reports Federal 1969–Present	44	23	21
21 Legal Resource Index	44	23	21
204 EEOC Decisions	43	24	19
162 Federal Rules Decisions	41	25	16
247 American Law Reports 3rd 1965–Present	41	20	21

PERCENT OF OFFICES (vertical axis: 10 to 80)

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.3

PERCENT OF OFFICES

Category	Very Useful	Extremely Useful	Total
203 Civil Service Commission Decisions	23	17	40
201 Shorts of Certif. Agenda Decisions	30	10	40
146 Department of Defense Directives	27	13	40
250 American Jurisprudence 2d	18	21	39
152 Executive Orders	21	17	38
141 Statutes at Large	20	18	38
106 Fed. Labor Relations Authority Decisions	27	11	38
146 State Statutes	20	17	37
24 Opinions of the Judge Advocate General	27	8	35
248 American Law Reports 1948-1965	20	15	35

VERY USEFUL   EXTREMELY USEFUL

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.4

VERY USEFUL   EXTREMELY USEFUL

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.7

PERCENT OF OFFICES

| | 151 Federal Register Abstracts | 215 Decisions/Orders National Labor Relations Board | 163 Tax Court 1942-Present U.S. | 157 Federal Property Manage. Regulations | 155 General Accounting Office Decisions | U.S. Treaties & Other International Agreements | 164 Key Regulations | 188 Treaties & Other Inter Agreements of U.S. (Bevans) | 207 Decisions of Administrative of Veterans Affairs | 225 Revenue Rulings of the Internal Revenue Service |

■ VERY USEFUL   ▦ EXTREMELY USEFUL

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.8

PERCENT OF OFFICES

182 West Bankruptcy Reporter	198 Decisions of Congress, Treasury 1894-1921	194 Tax Court Memorandum Decisions	227 Treasury Decisions	225 Revenue Procedures of the IRS	190 U.S. Court of Customs & Patent Appeals Reports	177 Unpub. Inter. Appendage of Dept. of Defen.	185 U.S. Board of Tax Appeals 1924-1942	175 Board of International Law	172 International Legal Materials
13	12	12	12	11	11	11	10	10	10
7	7	6	7	7	7	6	7	5	5
6	5	6	5	5	5	5		5	5

▨ VERY USEFUL

▦ EXTREMELY USEFUL

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.9

PERCENT OF OFFICES

Legend:
- ▨ VERY USEFUL
- ▦ EXTREMELY USEFUL

Categories:
- 232 Decisions of Employee Comp. Appeals Board — 9
- 234 Occu. Safety & Health Review Commission Reports — 8
- 174 Digest of U.S. Practice in Internt'l. Law — 8
- 170 U.N. Treaty Series — 8
- 200 Decisions of 1st Comptroller 1880-1894 — 7
- 199 Decisions of 2nd Comptroller 1817-1894 — 7
- 217 Decisions of Commissioner of Patents — 7
- 187 D.C. District Court Criminal Decisions — 6
- 186 D.C. Court of Appeals Crim. Decisions — 6
- 220 Admin. Deci. Immigr./Nature. Laws of the U.S. — 6

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.10

PERCENT OF OFFICES

6	5	5	5	4	4	4	4

218
Patents
Quarterly

191
Customs
Court Reports

175
Neg. History of
Protocols, 1946

220
Foreign Claims
Settle. Commission
Annual Reports

215
Nat'l. Transport.
Safety, NTSB
Board Decisions

221
Decisions of
Dept. of Interior
Ref. Public Lands

219
Federal Trade
Commission
Decisions

216
Interstate
Commerce
Comm. Reports

3
207
Aeronautics
Board Reports

3
221
Federal
Communications
Commiss. Reports

VERY USEFUL   EXTREMELY USEFUL

Percent of Offices Rating Data Base as Extremely or Very Useful

FIGURE 10.11

Average Data Base Usefulness Rating

FIGURE 11.1

Bar Shading Represents the percentage of respondents choosing:

EXTREMELY USEFUL, VERY USEFUL, MOD. USEFUL, SLIGHTLY USEFUL, NOT USEFUL

AVG.
EXTREMELY 5
VERY 4
MODERATELY 3
SLIGHTLY 2
NOT USEFUL 1

Data Base	Rating
180 United States Code	4.4
178 F.2d	4.2
177 U.S. Supreme Court Decisions	4.2
179 F.Supp	4.1
16 Code of Federal Regulations	4.0
142 Recent Public Laws	3.7
24 Shepards Citations	3.6
181 U.S. Court of Claims	3.5
180 Fed.	3.5
197 Congr. & Admin. News Regulations (Unpub) 1951—Present	3.4

Average Data Base Usefulness Rating

FIGURE 11.2

AVG.

EXTREMELY 5

VERY 4

MODERATELY 3

SLIGHTLY 2

NOT USEFUL 1

Data base	Rating
196 Dennis' Federal Directory 1971–Present	3.4
150 Federal Register	3.3
144 Legislative History	3.3
202 Merit System Protection Board Decisions	3.2
148 Federal Personnel Manual	3.2
246 America's Law Reports, Federal 1969–Present	3.1
241 Legal Resolution Index	3.1
204 EEOC Decisions	3.1
180 Federal Rules Decisions	3.1
150 Executive Orders	3.1

Bar Shading Represents
the percentage of
respondents choosing:

▨ EXTREMELY USEFUL   ▨ MOD. USEFUL

▨ VERY USEFUL   ▨ SLIGHTLY USEFUL

▦ NOT USEFUL

Average Data Base Usefulness Rating

FIGURE 11.3

AVG.

EXTREMELY 5 —

VERY 4 —

MODERATELY 3 —

SLIGHTLY 2 —

NOT USEFUL 1 —

3.1 — 141 Statutes Large

3.0 — 250 American Jurisprudence 2d

3.0 — 247 American Law Reports 1980-Present

2.9 — 242 Full Text of ABA Review Articles

2.9 — 51 Opinions of the Attorney General

2.9 — 203 Civil Service Commission Decisions

2.9 — 149 State Statutes

2.8 — 291 Corpus Juris Secundum

2.8 — 248 American Law Reports 1945-1960

2.8 — 206 Fed. Labor Relations Auth. Decisions

Bar Shading Represents the percentage of respondents choosing:

EXTREMELY USEFUL.   VERY USEFUL.   MOD. USEFUL.   SLIGHTLY USEFUL.   NOT USEFUL

Average Data Base Usefulness Rating

FIGURE 11.4

Bar Shading Represents the percentage of respondents choosing:

■ EXTREMELY USEFUL   ▨ VERY USEFUL   ▧ MOD. USEFUL   ▨ SLIGHTLY USEFUL   ▥ NOT USEFUL

AVG.
EXTREMELY 5.
VERY 4.
MODERATELY 3.
SLIGHTLY 2.
NOT USEFUL 1.

2.8 — 201 Boards of Contract Appeals Decisions
2.8 — 166 Department of Defense Directives
2.7 — 214 Opinions of the Judge Advocates General
2.7 — 205 Federal Labor Arbitration Decisions
2.7 — 150 Joint Travel Regulation
2.7 — 145 Congressional record
2.6 — 263 Am. Jurisprudence Legal Facts 1974–Present
2.6 — 240 American Law Reports 1919–1948
2.6 — 244 West Digest (As part of full text data base)
2.6 — 207 Fed. Labor Relations Council Decisions

Average Data Base Usefulness Rating

FIGURE 11.5

Bar Shading Represents the percentage of respondents choosing:

- EXTREMELY USEFUL
- VERY USEFUL
- MOD. USEFUL
- SLIGHTLY USEFUL
- NOT USEFUL

AVG.
- EXTREMELY 5.
- VERY 4.
- MODERATELY 3.
- SLIGHTLY 2.
- NOT USEFUL 1.

Data Base	Avg.
West Publishing from State Court Decisions	2.6
Department of Defense Instructions	2.6
Office of Management & Budget Circulars	2.6
Pending Bills	2.6
Defense Acquisition Regulation	2.6
Am. Jurisprudence Proof of Facts 1959-1975	2.5
West Digest (by Headings) (dot base)	2.5
U.S. Attorney General Briefs	2.5
Court Martial Tips & Military Justice Reporter	2.5
U.S. Manual for Courts-Martial	2.5

Average Data Base Usefulness Rating
Response About Usefulness

FIGURE 11.6

Database	Avg.
156 Federal Travel Regulation	2.5
151 Federal Register Methods	2.5
208 Arb. Grlc. For Labor–Mgmt. Relations Decisions	2.4
193 Full Text of State Court Decisions	2.4
164 Federal Acquisition Regulation	2.4
208 Secy. Response Fund Decisions	2.3
189 Unay. Decisions of the Courts of Military Review	2.3
163 Army Regulations	2.3
215 Decisions Orders National Labor Relations Board	2.2
163 Tax Court of the U.S. 1942–Present	2.2

AVG. 5 — EXTREMELY

VERY 4 —

MODERATELY 3 —

SLIGHTLY 2 —

NOT USEFUL 1 —

Bar Shading Represents
the percentage of
respondents choosing:

EXTREMELY USEFUL

VERY USEFUL

MOD. USEFUL

SLIGHTLY USEFUL

NOT USEFUL

Average Data Base Usefulness Rating

FIGURE 11.7

Bar Shading Represents the percentage of respondents choosing:

EXTREMELY USEFUL

VERY USEFUL

MOD. USEFUL

SLIGHTLY USEFUL

NOT USEFUL

AVG.

EXTREMELY 5

VERY 4

MODERATELY 3

SLIGHTLY 2

NOT USEFUL 1

AVG.	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9

162 Air Force Manuals

161 Air Force Regulations

157 Federal Property Manage. Regulations

155 General Accounting Office Manuals

158 Decision of Boards for Correc. of Military Records

159 U.S. Treaties & International Agreements

164 Navy Regulations

225 Revenue Rulings of the Internal Revenue Service

108 Decisions of Comp. Genl. 1894-1921

84 Tax Court Memorandum Decisions

Average Data Base Usefulness Rating

FIGURE 11.8

Bar Shading Represents the percentage of respondents choosing:

EXTREMELY USEFUL · VERY USEFUL · MOD. USEFUL · SLIGHTLY USEFUL · NOT USEFUL

AVG.

EXTREMELY 5.
VERY 4.
MODERATELY 3.
SLIGHTLY 2.
NOT USEFUL 1.

AVG.	Data Base
1.9	49 Treaties & Other Intern'l. Agreements of the U.S. (Bevans)
1.8	237 Decisions of Administrator of Veterans Affairs
1.8	202 Decisions of Employees Comp. Appeals Board
1.8	227 Treasury Decisions
1.8	226 Revenue Procedures of the IRS
1.8	192 Weekly Bankruptcy Reporter
1.8	185 U.S. Board of Tax Appeals 1924-1942
1.7	234 Occu. Safety & Health Review Commission Reports
1.7	190 U.S. Court of Customs & Patent Appeals Reports
1.7	174 Digest of Current Practice in Intern'l. Law

Average Data Base Usefulness Rating

FIGURE 11.9

Bar Shading Represents the percentage of respondents choosing:

- EXTREMELY USEFUL
- VERY USEFUL
- MOD. USEFUL
- SLIGHTLY USEFUL
- NOT USEFUL

AVG.

- EXTREMELY 5
- VERY 4
- MODERATELY 3
- SLIGHTLY 2
- NOT USEFUL 1

Data Base	Rating
Digest of International Law	1.7
International Legal Materials	1.7
Unpub. Inter. Agreements of Dept. of State.	1.7
Decisions of Int'l Court of Justice 1880–1984	1.6
Decisions of Zip Courts 1817–1984	1.6
D.C. District Courts Criminal Decisions	1.6
D.C. Court of Appeals Crim. Decisions	1.6
U.N. Treaty Series	1.6
Admin. Decs. Immigrat. Natural. Laws of the U.S.	1.5
U.S. Patents Quarterly	1.5

Average Data Base Usefulness Rating

AVG.

EXTREMELY 5

VERY 4

MODERATELY 3

SLIGHTLY 2

NOT USEFUL 1

FIGURE 11.10

| 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |

217 Decisions of Comptroller of Patents

181 U.S. Customs Court Reports

175 Neg. Treaty of Prelimin. of Geneva Conv. 1949

235 Natl. Transportation Safety Board Decisions

231 Decisions of Dept. of Interior Re: Public Lands

230 Foreign Claims Settle. Commis. Annual Reports

222 228 Aeronautics Board Reports

221 Federal Communications Commiss. Reports

220 Federal Power Commiss. Reports

219 Federal Trade Commission Decisions

Bar Shading Represents the percentage of respondents choosing:

▨ EXTREMELY USEFUL   ▨ MOD. USEFUL

▨ VERY USEFUL   ▨ SLIGHTLY USEFUL

▨ NOT USEFUL

Average Data Base Usefulness Rating

FIGURE 11.11

AVG.
EXTREMELY 5.

VERY 4.

MODERATELY 3.

SLIGHTLY 2.

NOT USEFUL 1

| 1.4 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.2 |

216
Interstate
Commerce
Comm. Reports

210
Sec. & Exch.
Comm. Records
and Reports

228
Customs
Bulletin

224
Federal
Maritime
Commission. Reports

208
Aeronautics
Board Orders

212
Atomic
Energy
Commission. Reports

214
Nuclear Reg.
Comm. Opinions
and Decisions

236
Inspector of
the Board of
Gama, Fid. Rev.

203
Dept. of
Agriculture
Decisions

Bar Shading Represents
the percentage of
respondents choosing:

EXTREMELY USEFUL.

VERY USEFUL.

MOD. USEFUL.

SLIGHTLY USEFUL

NOT USEFUL.